EverExceed®
power your applications

Deep Cycle AGM Range

# EXCELLENT CYCLING ABILITY

FOR
SOLAR / PHOTOVOLTAIC
WIND GENERATION
INVERTER / MOBILITY
TELECOMMUNICATION
APPLICATIONS


## DP-12200B

SEALED VRLA MONOBLOC AGM BATTERIES
VALVE REGULATED LEAD ACID BATTERY
FOR CYCLING APPLICATIONS

**12V 200AH @ 20 HR RATE to 1.75VPC**

**12V 220AH @ 100 HR RATE to 1.75VPC**

# LONG DURATION

### Innovative Features

- Thick positive plate design and high Tin alloy~12 years design life @ 20°C(68°F).
- Valve regulated lead acid battery (VRLA).
- High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency.
- Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection.
- Operates at a low internal pressure.
- Heavy duty insert copper terminals for ease of assembly, reduced maintenance and increased safety.
- Advanced lead tin calcium alloy, reduces grid corrosion and promotes long battery life.
- Standard: Reinforced ABS (UL 94HB) container and cover.
- Optional: Flame-retardant reinforced ABS container and cover compliant with U.L.94 V-0 with an Oxygen limiting Index of greater than 28%.
- Over-sized, through the partition inter-cell welds provide low resistance connections, with minimal power loss.
- Flame arresting, low pressure safety release venting system for individual cells, recognized per U.L. 924.
- Multicell design for ease of installation and maintenance.
- Horizontal or vertical operation.

| 12 VOLTS - 200 AMPERE HOUR @ 20 HOUR RATE | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AH Capacity to 1.75VPC @ 20°C (68°F) | | | | | | | | | | | |
| End Point Volts/Cell | 1.5hr | 2hr | 3hr | 4hr | 5hr | 8hr | 10hr | 12hr | 20hr | 24hr | 100hr |
| 1.75 | 129 | 138 | 146 | 154 | 158 | 174 | 180 | 184 | 200 | 204 | 220 |

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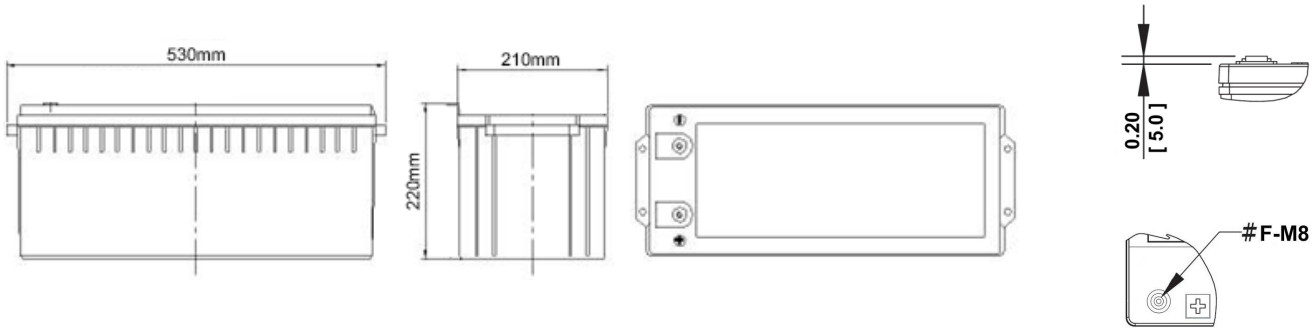


**Length: 530mm Width: 210mm Height: 220mm**

| Electrical Specifications | | | | | | |
|---|---|---|---|---|---|---|
| Cells Per Unit | Voltage Per Unit | Weight | Electrolyte | Maximum Discharge Current(5s) | Short Circuit Current | Internal Resistance Milli-ohms |
| 6 | 12.84 | 121.0lbs 55.0kg | SG = 1.300 | 1800 Amps | 5400 Amps | 2.6 |

| | |
|---|---|
| **Capacity** | 200 Ah @ 20 hr. rate to 1.75 volts per cell @ 20°C (68°F).<br>220 Ah @ 100 hr. rate to 1.75 volts per cell @ 20°C (68°F). |
| **Applicable Operating Temperature Range** | -40°C (-40°F) to +70°C (158°F). |
| **Ideal Operating Temperature Range** | +20°C (+68°F) to +30°C (+86°F ). |
| **Floating Charging Voltage** | 13.5 to 13.8 VDC/unit Average at 20°C (77°F). |
| **Recommended Maximum Charging Current Limit** | 40 Amperes ( 0.20C20 Amperes ) |
| **Equalization and Cycle Service Charging Voltage** | 14.1 to 14.4 VDC/unit Average at 20°C (77°F). |
| **Maximum AC Ripple (Charger)** | 0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.<br>Maximum voltage allowed = 1.4% RMS (4% P-P).<br>Maximum current allowed = 1.00 amperes RMS (C/20) to 1.75VPC. |
| **Self Discharge** | EverExceed Deep Cycle AGM Range batteries may be stored for up to 12 months at 20°C (68°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |
| **Accessories** | F-M8 inter unit connectors racks and cabinet systems are available. |
| **Terminal: Inserted** | Threaded copper alloy insert terminal. |
| **Terminal Hardware Initial Torque: Inserted Terminal** | 11 N-m |

| Constant Power Discharging Ratings - Watts Per Cell @ 20°C (68°F) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| End Point Volts/Cell | 1.5hr | 2hr | 3hr | 4hr | 5hr | 8hr | 10hr | 12hr | 20hr | 24hr | 100hr |
| 1.85 | 152 | 123 | 87.5 | 69.5 | 57.5 | 39.8 | 33.3 | 28.9 | 18.8 | 15.6 | 4.12 |
| 1.80 | 161 | 128 | 91.8 | 72.6 | 60.6 | 41.4 | 34.5 | 29.6 | 19.5 | 16.4 | 4.42 |
| 1.75 | 167 | 133 | 93.6 | 74.4 | 61.7 | 42.5 | 35.4 | 30.1 | 19.8 | 16.7 | 4.56 |

| Constant Current Discharging Ratings - Amperes Per Cell @ 20°C (68°F) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| End Point Volts/Cell | 1.5hr | 2hr | 3hr | 4hr | 5hr | 8hr | 10hr | 12hr | 20hr | 24hr | 100hr |
| 1.85 | 78.9 | 62.7 | 44.7 | 35.3 | 29.1 | 20.3 | 16.7 | 14.3 | 9.34 | 7.95 | 2.06 |
| 1.80 | 83.6 | 67.1 | 47.7 | 37.3 | 31.1 | 20.9 | 17.5 | 14.9 | 9.74 | 8.29 | 2.12 |
| 1.75 | 86.0 | 68.9 | 48.5 | 38.4 | 31.6 | 21.7 | 18.0 | 15.4 | 10.0 | 8.50 | 2.20 |

**Note:** Batteries to be mounted with 0.39 in (1.00 cm) spacing minimum and free air ventilation.
Specifications subject to change without notification.

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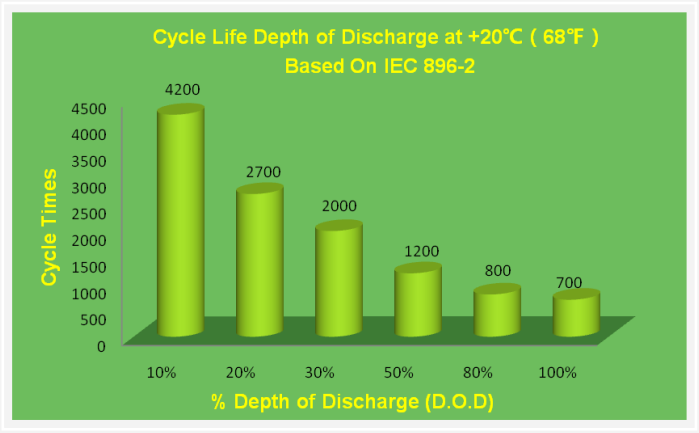
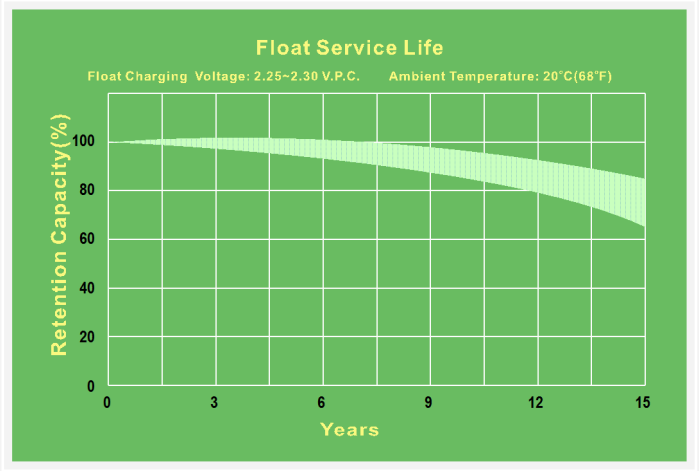
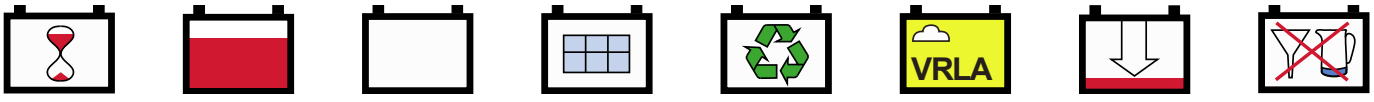



## TYPICAL CYCLIC PERFORMANCE

| CAPACITY WITHDRAWN | CYCLES |
|---|---|
| 100% | 700 |
| 80% | 800 |
| 50% | 1200 |
| 25% | 2100 |
| 10% | 4200 |



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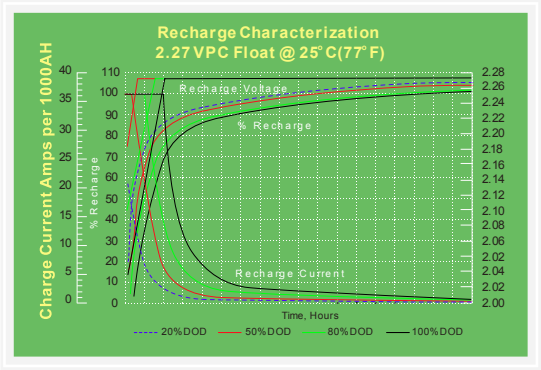
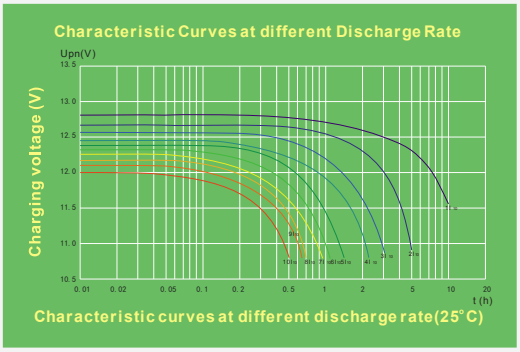
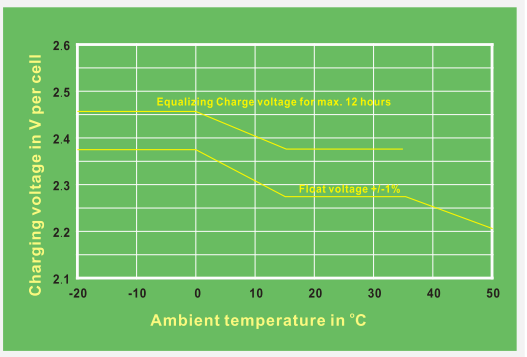


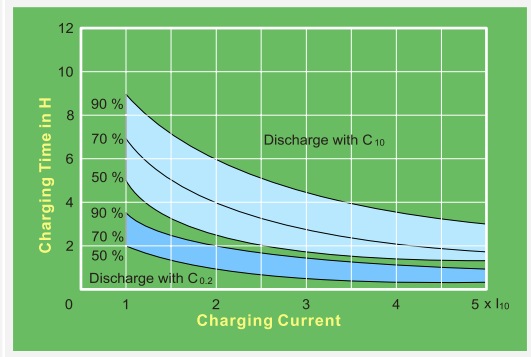

## Float Voltage & charging

Constant Voltage charging is recommended
Recommended float voltage: 2.27VPC @ 25°C(77°F)
Float Voltage Range: 2.25VPC to 2.30 VPC @ 25°C(77°F)
Equalize voltage: 2.35VPC for 12 Hours

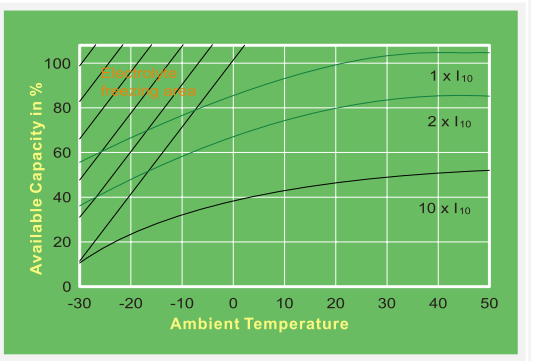



Temperature compensation:

Apply for temperature range of 0°C / 32°F to 40°C / 104°F. Sub tract 3 mV / °C / cell or 1.7 mV / °F / cell, above 25°C / 77°F. Add 3mV / °C / cell or 1.7 mV / °F / cell, below 25°C / 77°F.

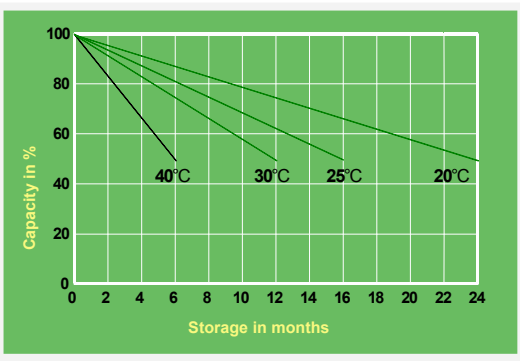



For charging 2.27 V/cell is recommended. The charging voltage must be compensated according to the curve for continuously different battery ambient temperature.




Extracted capacity in relation to the temperature.

Recharging time in dependence of charging current (guide values) for up to 50, 70 and 90% of capacity at 25°C and with a charging voltage of 2.27 V/cell.




Self-discharge in relation to the storage temperature.